

### Abstract of the Disclosure

Provided are a packet transmission method for transmitting packets in a forward link of a multibeam satellite communication system and a computer-readable recording medium for recording a program that implements the method. The packet transmission method transmitting packets to mobile stations in a forward link of a multibeam satellite communication system, comprising the steps of: wherein  
5 downlink beams of a satellite share an orthogonal spreading code set for transmitting packets to the mobile stations, a) generating downlink beam signals by using an identical structure for the radio frames transmitted through the downlink beams and an identical pseudo-noise (PN) scrambling  
10 code for generating downlink beam signals; and b) synchronizing transmission timings of frames, symbols and spread chips on the downlink beam signals.